

The Worth of Forensic Psychology: A Review of the BRACE Character Profile as Prospects of Criminal Profiling

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Abstract— This paper showed that a prospects of criminal profiling based critical review of the BRACE character profile because potential of violent and serial crime is a growing concern in Indonesia and elsewhere. The BRACE Character Profile is a powerful analytical tool that is designed to profile the core human nature of a known or unknown subject (UNSUB), and provides a rich narrative of a subject's profile across three domains, namely cognitive, behavioral, and existential motivational. The objectives of the current study are to briefly address the potential of offender profiling and current shortcomings, introduce the BRACE Character Profile instrument, and explain the rationale and basic methodology. A common criticism that can be addressed by the BRACE methodology is the reported lack of scientific grounding, empirically evidence, and standardization of narrative type profiles, and the “one size fits all” approach of actuarial profiling methods. The methodology has had exposure in forensic scale activities of UNSUB profiling, psychological autopsies, cold case reviews, interrogation strategy, risk of violence determination, and defense or prosecutor strategy, but the need to qualify the usefulness in each area has to be addressed to ensure practical effectiveness and evidentiary acceptability, and entrench the methodology more widely.

Keywords—forensic psychology; BRACE measurement; criminal profiling

I. INTRODUCTION

The prevalence of violent and serial crime is a growing concern in Indonesia and elsewhere. Despite the widespread use of criminal profiling in serial crime investigations, the practice continues to endure fierce criticism from researchers, who almost unanimously agree that profiling lacks scientific foundation and depends on flawed methodology [1]. As a result the validity and utility of criminal profiling is compromised to the extent where evidence is not admissible in court, and serious miscarriages of justice are caused. The challenge therefore exists to establish an empirically credible instrument to standardize and benchmark behavioral profiles [2].

Current study are to briefly address the potential of offender profiling and current shortcomings, introduce the BRACE Character Profile instrument, and explain the rationale and basic methodology, establish independent

accuracy of BRACE, which is compared to published averages achieved with traditional profiling methods, and high light the potential applications and focus areas for future study[3]. It has a powerful analytical tool that is designed to profile the core human nature of a known or unknown subject (UNSUB), and provides a rich narrative of a subject's profile across three domains, namely cognitive, behavioral, and existential motivational [4]. The ways a person thinks, desires, and acts are reflected in graphical format and interpreted in a systematic manner that are structured according to the prototypical personality disorder types of the DSM IV-TR [5].

II. MATERIALS AND METHODS

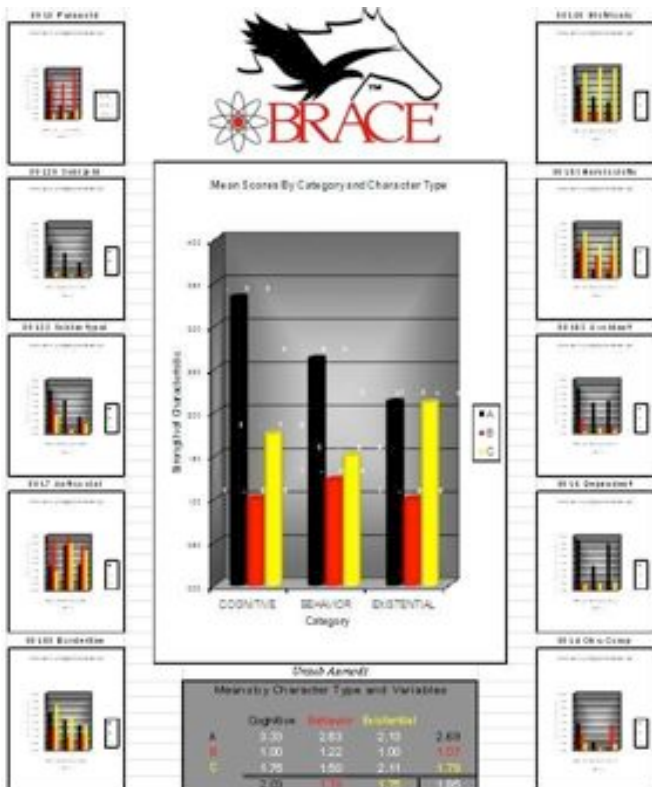
The BRACE Character Profile[®] input form consists of 75 vignette like questions designed to rate behavioral aspects of a know or unknown subject in terms of severity and role in the core character [6]. The questions are clustered in matrix format across three core character types, namely Types A, B, and C, and three domains of eight or nine variables each, namely cognitive, behavioral, and existential [7].

The methodology has had exposure in forensic scale activities of UNSUB profiling, psychological autopsies, cold case reviews, interrogation strategy [8]. By referencing the strength of scores related to their type domain characteristics, the likely triggers and expressions of maladaptive behavior is identified, which can be applied to a variety of settings and objectives [9]. The matrix structure and associated characteristics are illustrated in table 1 below.

TABLE I. MATRIX STRUCTURE [7].

Type / Domain	COGNITIVE	BEHAVIOR	EXISTENTIAL
TYPE A SAFETY & SECURITY (RISK MANAGEMENT) (FEAR) AMORAL (THE SIMPLE) Strong's 6612	9 items too open-minded, poor judgment, dysfunctional, simplistic thinking	8 items shallow, impulsive, time and stimulus bound, undisciplined, immature	8 items deluded values, poorly developed social conscience, limited interests, short-sighted, unsophisticated
TYPE B POWER & CONTROL (OPPOSITION-DEFIANT) (ANGER) ANTISOCIAL (THE SCORNER) Strong's 3778	8 items defensive, controlling, paranoid, calculating, subversive, manipulative	9 items acted-out force and violence, noncompliance, rebelliousness, defiance, competitive	8 items desire for power and control, high sense of entitlement, low empathy, aversion to limits
TYPE C PLEASURE & COMFORT (SELF-SERVING) (DESIRE) PRO-SELF (THE FOOLISH) Strong's 3684	8 items deifies self, proactive fantasy, preoccupation with self-serving desires	8 items self-serving, pleasure seeking, attention seeking, poor boundaries, lies and deception, dramatic	9 items selfish motives and values, situational ethics, desires excitation and self-expression, fluid sense of self

The questionnaire results are processed in an Microsoft Excel based macro and portrayed visually in a graphical presentation supplemented by detailed scores that indicate the presence or absence of prominent features at each matrix cross-section. A quick visual comparison of the subject profile is presented with the ten personality disorders specified in the DSM IV-TR. A typical graphical presentation of the results is illustrated in table 2 below.

TABLE II: GRAPHICAL OVERVIEW
PRESENTATION OF BRACE CHARACTER
PROFILE RESULTS [8]

Another useful feature of the BRACE Character Profile is that the questionnaire input and profile interpretation tasks may be done by different parties, including teams, which implies that the data capture, who is typically an investigator in criminal settings, does not require specialized nor psychological training [10]. For the purpose of establishing the validity and utility of the BRACE Character Profile four question sets have been completed with the subject identity not revealed. These were analyzed and interpreted, and after the subject identities were made known, the statements that made up the behavioral profile were compared to available information about the real subject identity.

III. DISCUSSION

The results that were achieved with the BRACE Character Profile is presented in Diagram 3 and compared with published benchmarks that mostly examined traditional narrative type or actuarial profiles.

Table III: BRACE Character Profile Accuracy Results

PRO NO.	RATER	DESIGNATION	SUBJECT	ACCURACY (%)
1	Prof. Dr. Sukarti	Prof. Emeritus at Gadjah Mada University, Indonesia	INA Male Killer	88
2	Prof. Dr. Dudung	Researcher	INA Male Killer	21 to 34
3	Andri Frediansyah	Researcher	INA Female Robbery	91
4	Briptu. Dian Chandra	Policeman	INA Male Killer	89
5	I Yonico Martatino	Medical Student	Corporate Manager	96
6	Nur Lailatul M	Nursing Student	Benchmark Average	77
7	Gusti Jhoni	Psy. D. Student	Benchmark Average	14 to 31
8	Fitria Dini	Medical Student	Benchmark Average	65

The subject identities are not revealed in publication, as the inmate population in Indonesia are classified as a vulnerable population of particular note is that statements that were deemed as not accurate in these benchmark studies were mostly entirely incorrect or misleading, compared to no statements that were found to be incorrect in any of the BRACE profiles, but only partially correct, which was mainly due to a lack of information to confirm accuracy [11,12]. Therefore, in terms of accuracy the BRACE Character Profile instrument has promising potential to be developed as part of a standard and scientifically accepted process of criminal profiling.

The limitations of the current study are availability of a limited data sample, the setup did not test inter rater reliability, the potential effects of interpreter variability remain unknown, and the comparison between profile elements and real subject characteristics were done quality. Despite the promising results regarding profile accuracy, the utility or usefulness of the BRACE Character Profile methodology has to be established across the range of potential applications.

IV. CONCLUSIONS

The BRACE questionnaire takes upwards of 30 minutes to complete depending on the needs of additional information, and demands an intimate, in depth knowledge of the subject's behavioral traits and want acts dynamics, which is useful for knowledge sharing and strategy planning in an investigative team. The current study establishes the accuracy and validity of the BRACE methodology, but utility and cost benefit ratio has to be examined in practice across the various potential applications.

A common criticism that can be addressed by the BRACE methodology is the reported lack of scientific grounding, empirically, evidence, and standardization of narrative type profile, and “the one size fits all” approach of actuarial profiling method. The BRACE methodology has had exposure in forensic activities of UNSUB profiling, psychological autopsies, cold case reviews, interrogation strategy, risk of violence determination, and defence or prosecutor strategy, but the need to qualify the usefulness in each area has to be addressed to ensure practical effectiveness and evidentiary acceptability, and entrench the methodology more widely.

REFERENCE

1. L. Alison, M.D. Smith, and K. Morgan, “Interpreting the accuracy of offender profiles,” *Psychology, Crime & Law.*, 9(2), 185-195. doi:10.1080/1068316031000116274, 2003.
2. American Psychiatric Association. *Diagnostic and statistical manual of mental disorders*. Clinical Psychology: New York. 2009.
3. C. Dowden, C. Bennell, and S. Bloomfield, “Advances in offender profiling: A systematic review of the profiling literature published over the past three decades,” *Journal of Police and Criminal Psychology.*, 22, 44-56. doi:10.1007/s11896-007-9000-9. 2007.
4. C. Broman, “The Longitudinal Impact of Adolescent Drug Use on Socioeconomic Outcomes in Young Adulthood,” *Journal of Child & Adolescent Substance Abuse.*, 18(2), 131-143. Retrieved from ERIC database, 2009.
5. DSM-IV-TR. Washington,DC; Author doi: 10.1176/appi.books.970890423349. 2000.
6. B.E. Harcourt, *Against prediction: Profiling, policing, and punishing in an actuarial age*. Chica-go, IL: The University of Chicago Press, 2007.
7. W. Petherick, *The fallacy of accuracy in criminal profiling*. In *Serial crime: Theoretical and practical issues in behavioral profiling*, 2009. pp. 53-64.
8. M.A. Burlington, “A validity test of the BRACE Character Profile,” *The Master's Advocate.*, Elsevier Academic Press. Smith, R. L. 15(2), 11-12, 2008.
9. R.N. Kocsis, *Smoke and mirrors: The illusions of accuracy in criminal profiles*. In *Criminal profiling: Principles and practice*. Totowa, NJ: Humana Press, 2006. pp. 13-26.
10. Associated Press [AP](2010). Obesity costs U.S. \$168 billion, study finds. USA Today. Retrieved October 20, 2010. [Online]. Available: http://www.usatoday.com/story/yourlife/fitness/2010-10-18-obesity-costs_N.htm?loc=interstitialskip.
11. J. Asendorpf, P. Borkenau, F. Ostendorf, and Van Aken, M, “Carving per-sonality description at its joints: Confirmation of three replicable personality prototypes for both children and adults,” *European Journal of Personality*, 15(3), 169-198. Retrieved June 19, 2009, doi:10.1002/per.408, May, 2001.
12. C. Braet, L. Claus, S. Verbeken, and L. Van Vlierberghe, “Impulsivity in overweight children,” *European Child & Adolescent Psychiatry.*, 16(8), 473-483. doi:10.1007/s00787-007-0623-2, 2007.